

Date: Tuesday, 5/16/2006 10:38:19 AM  
 User: Kim Johnston

## Process Sheet

Customer : CU-DAR001 Dart Helicopters Services Drawing Name : 0H-58 SKIDTUBE ASSEMBLY  
 Job Number : 27137A  
 Estimate Number : 10475  
 P.O. Number : N/A Part Number : D058672041  
 This Issue : 5/16/2006 S.O. No. : N/A Drawing Number : D2922 REV A1  
 Prsht Rev. : NC Project Number : N/A  
 First Issue : N/A Type : LANDING GEAR Drawing Revision : A1  
 Previous Run : 27136A Material : N/A  
 Due Date : 6/10/2006 Qty: 1 Um: Each  
 Written By : SEE ID COMMENT Below  
 Checked & Approved By : 9806-05-16  
 Comment : Est Rev:C 02.06.28 Re-format; ECN 258 KJ  
 Est Rev:D 06.02.06 Added Dt8025 EC

## Additional Product

Job Number:



Seq. #: Machine Or Operation: Description :

1.0 D2620 Bent 206 Skidtube



Comment: Qty.: 1.0000 Each(s)/Unit Total: 1.0000 Each(s)

Pick:

Qty Part Number Description Batch

1 D2620 Bent Tube 3" OD

B26863 Pm' 06-05-23 (1)

2.0 LANDING GEAR 1 LANDING GEAR RESOURCE 1



Comment: LANDING GEAR RESOURCE 1

1-Deburr Fwd edge of tube Pm' 06-05-23 (1)

2-Cut aft end of D2620 bent tube as per dwg D2922 Pm' 06-05-23 (1)

3-Drill pilot holes using drill jig DT8480 and DT8025 open to 0.312" dia. Pm' 06-05-23 (1)

4-Drill holes for wearplates using DT 8487 Open to 0.297" dia. Pm' 06-05-24 (1)

5-Drill holes for aft cap as per Dwg D2922 using drill jig DT 8025. Open using #6 Drill Bit Pm' 06-05-24 (1)

7-Remove inner indexing ridge on aft end of skidtube as per Dwg D2922 Pm' 06-05-24 (1)

8-Deburr and Blow out all chips from inside the tube Pm' 06-05-24 (1)

9-Weld D2794 cap as per QSI 004 and Dwg D2922. Use aluminum rod.

A/R Aluminum Rod

M18839 / MPA101 BE 06-05-25 (1)

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Mfg / Design Mgr	Approval QC Inspector

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Design Mgr	Approval QC Inspector
			Initial Design Mgr	Action Description Design Mgr	Sign & Date			

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

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Job Number:



Seq. #:

Machine Or Operation:

Description :

3.0 HAND FINISHING1

HAND FINISHING RESOURCE #1



Comment: HAND FINISHING RESOURCE #1

Chemical Conversion Coat as per QSI 005 4.1

*Pm' 06-05-281*

4.0 D2923

Web



Comment: Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s)

Pick:

Qty Part Number Description

Batch

1 D2923 Web

*B27146 Pm' 06-05-290*

5.0 LANDING GEAR 1

LANDING GEAR RESOURCE 1



Comment: LANDING GEAR RESOURCE 1

1-Open holes to finished size as per Dwg D2922(without cutting fluid) *Pm' 06-05-290*

2-Countersink crossbolt spacer holes as per Dwg D2922(without cutting fluid) *Pm' 06-05-290*

3-Deburr and Blow out all chips from inside the tube *Pm' 06-05-290*

4-Bond D2923 web in place as per QSI 015. Ensure holes lineup

A/R Sikaflex-291

*M100901*

Sikaflex expire date: *06-11-01*

*Pm' 06-05-290*

6.0

QC5

INSPECT WORK TO CURRENT STEP



Comment: INSPECT WORK TO CURRENT STEP

*DP 06-5-29*

7.0

D2794

Cap



Comment: Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s)

Qty

Part Number Description

Batch

1 D2794 Fwd Cap

*B 14400 BE 06-05-250*

W/O:		WORK ORDER CHANGES					
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Drawing Name: OH-58 SKIDTUBE ASSEMBLY

Job Number: 27137A

Part Number: D058672041

Job Number:



Seq. #:

Machine Or Operation:

Description :

8.0

D2649

Crossbolt Spacer



Comment: Qty.: 22.0000 Each(s)/Unit Total: 22.0000 Each(s)

Pick:

Qty Part Number Description Batch

22 D2649 Crossbolt spacer *B25864 BE 06-05-31*

9.0

LANDING GEAR 1

LANDING GEAR RESOURCE 1



Comment: LANDING GEAR RESOURCE 1

1-Weld D2649 cross bolt spacers as per QSI 004 and Dwg D2922.(Remember to back drill each hole to 0.250" before welding the other side)

A/R Aluminum Rod

*m 18839 BE 06-05-31*

3-Grind welds flush as per Dwg D2922

4-Counterbore 5/16" x 0.750" deep as per Dwg D2922

*DP 06-5-31*

10.0

QC5/9

WELD INSPECTION



*PD 06-06-06*

Comment: WELD INSPECTION

*06-06-02 (1)*

11.0

POWDER COATING

POWDER COATING



Comment: POWDER COATING

Powder Coat White Gloss (Ref: 4.3.5.1) as per QSI 005 4.3

*am 06-07-13 (1)*

12.0

QC3

INSPECT POWDER COAT/CHEMICAL CONVERSION



Comment: INSPECT POWDER COAT/CHEMICAL CONVERSION

*PL 06/07/13 (1)*

13.0

D26483

Wearpad



Comment: Qty.: 5.0000 Each(s)/Unit Total: 5.0000 Each(s)

Pick:

Qty Part Number Description Batch

5 D2648-3 Wearpad *B25904*

*DL 06/07/13 (1)*

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Job Number: 27137A

Part Number: D058672041

Job Number:



Seq. #:

Machine Or Operation:

Description :

14.0

D265615

Wearplate



Comment: Qty.: 1.0000 Each(s)/Unit Total: 1.0000 Each(s)

Pick:

Qty Part Number Description

Batch

1 D2656-15 Wearshoe

B24845

15.0

D265621

Wearplate



Comment: Qty.: 1.0000 Each(s)/Unit Total: 1.0000 Each(s)

Pick:

Qty Part Number Description

Batch

1 D2656-21 Wearshoe

B27075

16.0

D2924

Wearshoe



Comment: Qty.: 1.0000 Each(s)/Unit Total: 1.0000 Each(s)

Pick:

Qty Part Number Description

Batch

1 D2924 Wearshoe

B12425

17.0

MS27039108

Screw



Comment: Qty.: 50.0000 Each(s)/Unit Total: 50.0000 Each(s)

Pick:

Qty Part Number Description

Batch

50 MS27039-1-08 Screw

M19551

18.0

AN960JD10L

Washer



Comment: Qty.: 50.0000 Each(s)/Unit Total: 50.0000 Each(s)

Pick:

Qty Part Number Description

Batch

50 AN960JD10L Washer

M101291

DL 06/07/13 (1)

W/O:		WORK ORDER CHANGES					
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Job Number: 27137A

Part Number: D058672041

Job Number:



Seq. #:

Machine Or Operation:

Description :

19.0

ALS41032130

Insert



Comment: Qty.: 5.0000 Each(s)/Unit Total : 5.0000 Each(s)

Pick:

Qty Part Number Description Batch  
50 ALS4-1032-130 Insert M19393  
or (see QSI 017)

20.0

D26511

Plug



Comment: Qty.: 20.0000 Each(s)/Unit Total : 20.0000 Each(s)

Pick:

Qty Part Number Description Batch  
20 D2651-1 Plugs B25365

21.0

D26513

O-Ring



Comment: Qty.: 20.0000 Each(s)/Unit Total : 20.0000 Each(s)

Pick:

Qty Part Number Description Batch  
20 D2651-3 O-Rings B25866

22.0

D2646

Aft Cap



Comment: Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s)

Pick:

Qty Part Number Description Batch  
1 D2646 Aft Cap B25381

23.0

MS27039108

Screw



Comment: Qty.: 2.0000 Each(s)/Unit Total : 2.0000 Each(s)

Pick:

Qty Part Number Description Batch  
2 MS27039-1-08 Screw M19551

DL 00607113 (1)

W/O:		WORK ORDER CHANGES					
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			Initial Design Mgr	Action Description Design Mgr	Sign & Date			

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes ☐ No ☒ DQA: 19 Date: 26/07/24

NOTE: Date & initial all entries

QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

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Job Number: 27137A

Part Number: D058672041

Job Number:



Seq. #:

Machine Or Operation:

Description :

24.0

AN960JD10L

Washer



Comment: Qty.: 2.0000 Each(s)/Unit Total : 2.0000 Each(s)

Pick:

Qty	Part Number	Description	Batch
2	AN960JD10L	Washer	M101291

DL 06/02/13 (1)

25.0

HAND FINISHING1

HAND FINISHING RESOURCE #1



Comment: HAND FINISHING RESOURCE #1

1-Install inserts & wearpads as per dwg D2922. Insert a drop of Sikaflex at insert hole before installing wearplates.

A/R Sikaflex-291

Sikaflex expire date: 11/06

M101193

2-Install O-Rings D2651-3 on plugs D2651-1 with Petroleum Jelly and install plugs as per Dwg D2922

3-Install D2646 Aft Cap and seal with Sikaflex adhesive.Clean excess adhesive

A/R Sikaflex-291

Sikaflex expire date: 11/06

M101193

3- Wing Walk as per Dwg D2922 and QSI 005 4.4

M101266

Batch:

FC 06 07 13 (1)

26.0

QC3/5

INSPECT WORK/WING WALK



Comment: INSPECT WORK/WING WALK

M 06 07 13

(i)

27.0

PACKAGING 1

PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1

Identify and Stock

Location: -

N/A

28.0

DC

DOCUMENT CONTROL



Comment: DOCUMENT CONTROL

Inspection Level 21

06.07.20

Job Completion



U 06-07-19

W/O:		WORK ORDER CHANGES					
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DESIGN RF	DRAWN BY RF	DART AEROSPACE USA, INC. BELLEVUE, WA	
CHECKED [Signature]	APPROVED [Signature]	DRAWING NO. D2922	REV. A SHEET 1 OF 2
DATE 99.10.14		TITLE OH-58 SKIDTUBE ASSEMBLY SCALE NTS	
A	99.10.14	NEW ISSUE	
A1	# CP 01.08.20	Ø0.640 WAS Ø0.625	

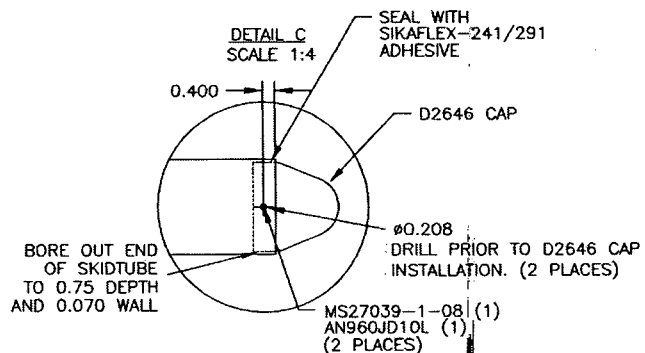
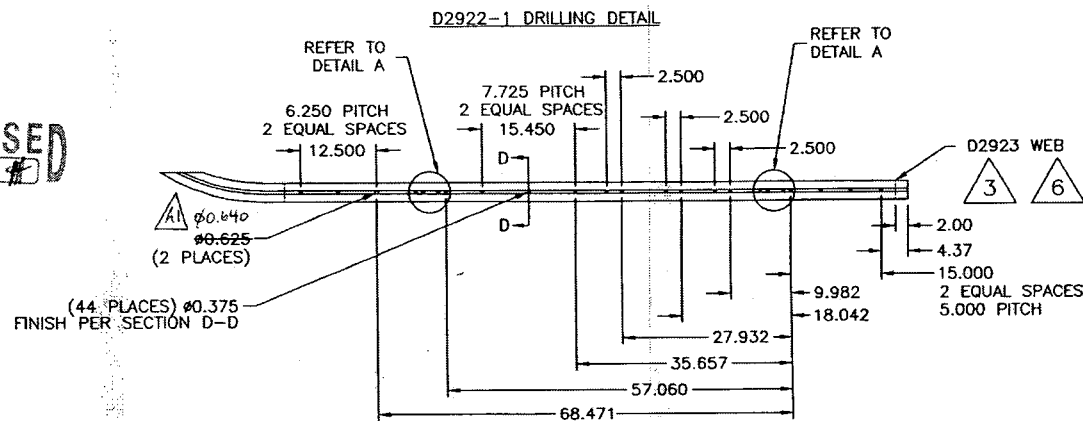
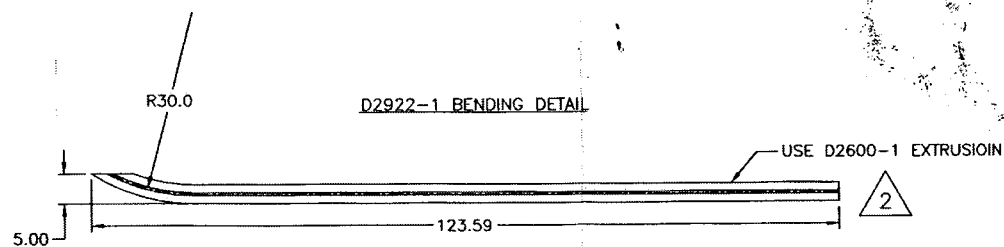
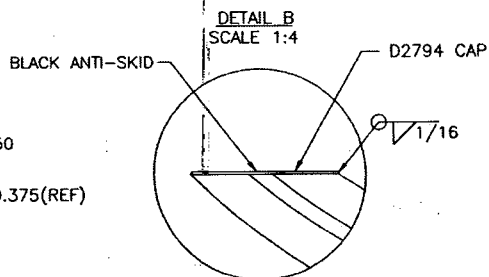
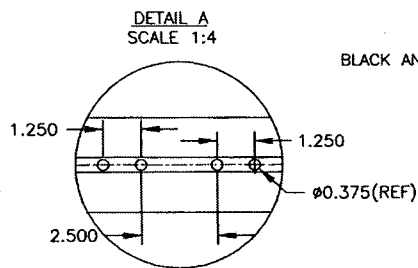
RELEASED  
00.05.11 #

Qty	Part Number	Description
X	D2922-041	SKIDTUBE ASSEMBLY
*	D2600-1	EXTRUSION
1	D2646	AFT CAP
4	D2648-3	WEARPAD
1	D2648-5	WEARPAD
22	D2649	CROSS BOLT SPACER
20	D2651-1	PLUG
20	D2651-3	O-RING
1	D2656-15	WEARSHOE
1	D2656-21	WEARSHOE
1	D2794	CAP
1	D2923	WEB
1	D2924	WEARSHOE
50	AKS7-1032-130 or AKS4-1032-130 or ALS7-1032-130 or ALS4-1032-130	INSERT
52	AN960JD10L	WASHER
52	MS27039-1-08	SCREW

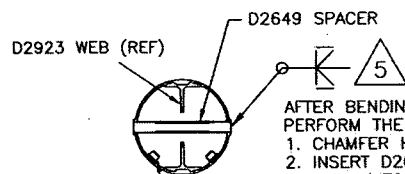
**GENERAL NOTES:**

- 1) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 2) LENGTH OF D2600-1 EXTRUSION REQUIRED BEFORE BENDING = 160 INCHES.\*
- 3) INSERT D2923 WEB TO LOCATION SHOWN OFF AFT END OF SKIDTUBE AND BOND WEB INTO OUTER TUBE WITH NON-STRUCTURAL SIKAFLEX-241/291 ADHESIVE PER DART QSI 015 AFTER BENDING.
- 4) USE DART DRILL TEMPLATE DT8406 TO LOCATE AND DRILL Ø0.297 HOLES FOR WEARSHOE INSERTS. INSTALL AKS7-1032-130 PER SECTION D-D (50 PLACES) AFTER FINISH. INSTALL MS27039-1-08 SCREWS AND AN960JD10L WASHERS IN ALL INSERTS. SEAL WITH SIKAFLEX-241/291.
- 5) WELDING TO BE DONE PER DART QSI 004.
- 6) FINISH:  
ACID ETCH, ALODINE PER DART QSI 005 4.1 PRIOR TO INSERTING D2923 WEB  
POWDER COAT ASSEMBLY GLOSS WHITE (REF 4.3.5.1) PER DART QSI 005 4.3  
BLACK ANTI-SKID PAINT AS INDICATED TO 0.50 ABOVE LOCATION RIDGE PER DART QSI 005 4.4
- 7) INSERT D2651-1 PLUG C/W D2651-3 O-RING IN HOLES MARKED 'P' (BOTH SIDES OF TUBE) AFTER FINISH (20 PLACES).

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WORK ORDER  
NO 27137A

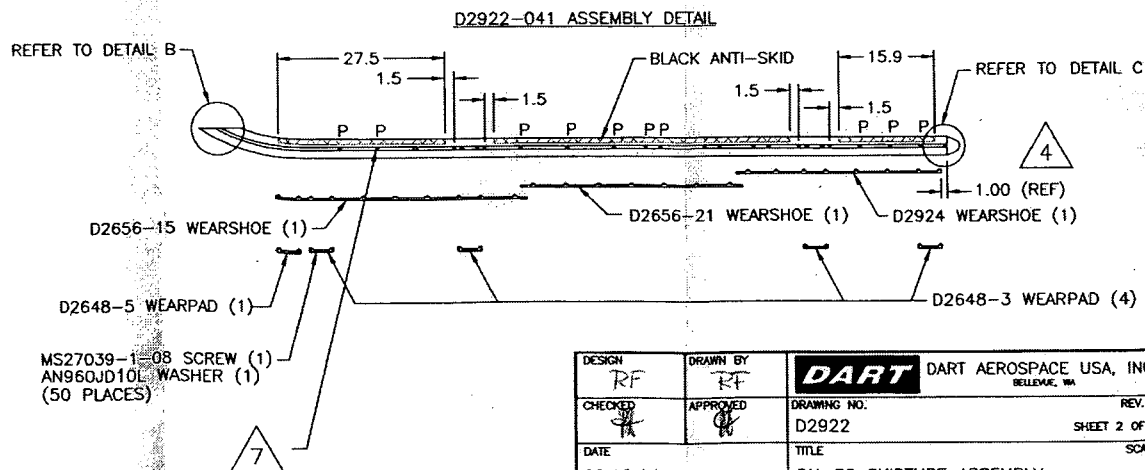


**SECTION D-D**  
SCALE 1:4  
FOR Ø0.375 HOLES ONLY



AFTER BENDING AND DRILLING ASSEMBLY  
PERFORM THE FOLLOWING FOR Ø0.375 HOLES ONLY:

1. CHAMFER HOLE 0.030 X 45°
2. INSERT D2649 SPACER (22 PLACES)
3. WELD INTO PLACE AND GRIND FLUSH
4. C-BORE D2649 SPACER TO Ø0.313 X 0.75 DEEP



MS27039-1-08 SCREW (1)  
AN960JD10L WASHER (1)  
(50 PLACES)

DESIGN RF	DRAWN BY RF	<b>DART</b> DART AEROSPACE USA, INC. BELLEVUE, WA	
CHECKED [Signature]	APPROVED [Signature]	DRAWING NO. D2922	REV. A SHEET 2 OF 2
DATE 99.10.14	TITLE OH-58 SKIDTUBE ASSEMBLY	SCALE 1:20	

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